

Beginning teacher network: The design of an online community of practice for beginning teachers in Australia

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Abstract: The high attrition rate of teachers in their first five years of teaching coupled with an ageing teacher profile necessitates innovative approaches to beginning teacher support and professional development. This paper argues for the development, implementation and evaluation of an online community of practice that involves cross-sectoral collaboration and which is linked to professional standards. The online community allows new teachers to be mentored by expert teachers and to communicate with peers, and provides access to a range of resources including lesson plans, videos of exemplary teaching, annotated lists of useful websites and frequently asked questions. Such access may help to lessen the feelings of isolation and lack of support felt by many beginning teachers, and provide a link between the practical realities and constraints of the classroom and the more innovative, research-based methods and strategies teachers learn while at university.

A generation of teachers at risk

The persistent failure of the teaching community to mentor and foster its new teachers has placed at risk a generation of novice teachers capable of regenerating an aging profession. Traditionally, teacher education courses were expected to produce teachers competent in knowledge, skills and performance to sustain them over the period of their teaching career. However, with the changing nature of modern education, the diverse range of knowledge and experience of teachers, and the variety of teacher education entry courses, it is now recognised that teachers' professional learning needs to be considered on a continuum, from initial undergraduate education, through school practicum, internship, induction to ongoing lifelong learning (DEST, 2003; Ramsey, 2000). The establishment of teaching standards is reflective of this changing view. Similarly, as part of this continuum, the induction of beginning teachers is recognised as being critical to their future career development and retention. Given that there is no systematic approach to teacher induction in Australia, its occurrence and nature is problematic for many novice teachers (DEST, 2002; Ewing & Smith, 2003; Moir & Gless, 2001), especially for those employed in rural and regional areas of Australia (Human Rights and Equal Opportunity Commission, 2000).

The high attrition rate of novice teachers is of growing problem both in Australia and around the world. The Australian College of Education survey of Australian teachers has reported that large numbers of teachers entering the profession do not expect to stay there (Richardson, 2002). In the USA, a national study by Ingersoll (2001) indicated that 39% of beginning teachers leave the profession in their first five years of teaching. A similar statistic of 30% was found in a UK national study (Adams, 2003). While no national studies have occurred in Australia, it is estimated that up to 25% of beginning teachers leave in their first five years (DEST, 2003). Attrition is highest amongst those who are young, better qualified, living and working under difficult conditions, teaching in particular subject areas and is most prevalent during times of economic prosperity (Macdonald, 1999). According to Macdonald, the causes of attrition include burdensome administrative tasks, expectations of curriculum change, increased accountability, role conflict, student management, lesson planning, alienation, isolation, denigration of personal interests and dependence on outside opinion and observation. The problem is compounded in Australia where an ageing workforce will result in a large number of retirements within the next 8-10 years (Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), 2003a). Planning for the massive shortfall of teachers is crucial. While initiatives are in place to attract teachers to the profession, such as more funded university places and retraining schemes, an equal emphasis is required to retain high quality teachers. The Committee for the Review of Teaching and Teacher Education (DEST, 2003) states that:

The most crucial factor in ensuring an adequate supply of teachers for the future will be to retain and support as many of those teachers currently employed as possible, particularly those in the earlier years of their careers. Induction and mentoring are an important part of the solution to retaining teachers in Australia's schools. (p. 144)

Mentoring beginning teachers

With recommendations for greater collaboration between teachers' peers, training universities, schools, employer organizations and professional associations in the induction process (DEST, 2003), and the potential use offered by information communication technologies (Bransford, Brown & Cocking, 2000), it is now possible to provide extended mentoring support and professional development from a wide range of professional sources. Electronically, this can be achieved in a number of ways. Herrington, Glazer and Herrington (2002) provided a list of electronic tools and resources that characterise online professional development and support for teachers and characterised websites as either:

- *Structured Communities* such as university masters and graduate certificate courses that provide information, tasks and environments for professional development;
- *Semi-structured Communities* sites that enable users to choose professional development on specific themes or issues;
- *Informal Communities* are environments on the internet that enable groups of like-minded professionals to communicate and interact on issues of their concern. Such communities of practice have developed for teachers generally (e.g., *Tapped in*) and for curriculum specialists, for example, mathematics (Herrington, Herrington, Oliver, & Omari, 2001) and physical education (Lockyer & Patterson, 2001);
- *Resource banks* that provide a wealth of resources often in the form of links to other sites on the internet.

The notion of community, in particular, communities of practice, is gaining widespread acceptance as a mechanism for support and development. The concept of communities of practice has evolved from Lave and Wenger's (1991) theory of situated learning where professionals learn through increasing contribution and participation within their community. This concept fits with recognised patterns in both motivation and activity in stages of the teacher career cycle (Lockyer & Patterson, 2001). Further, the concept of community of practice focuses on a collective of professionals—learning as distributed across the diverse membership of the profession (i.e., novice, intermediate, expert) rather than an individual approach to support and professional development (Buysse, Sparkman, & Wesley, 2003; Smith, 2003). Recommendations from the

Committee for the Review of Teaching and Teacher Education (DEST, 2003) suggest that improved, innovative approaches to induction should involve collaboration between beginning teachers' peers, teacher training institutions, employers and professional associations.

Developing a beginning teacher online community

Bransford, Brown and Cocking (2000) in their summary of research into school learning noted that professional development is often done in isolation: 'Opportunities for continued contact and support, as teachers incorporate new ideas into their teaching are limited, yet the rapid spread of Internet access provides a ready means of maintaining such contact if appropriately designed tools and services are available' (p. 27). A number of semi structured online resources have been developed for the professional development and support of beginning teachers: the Ontario Teachers' Federation's *Survive and Thrive Virtual Conference for Beginning Teachers* and Indiana University's *The Novice Teacher Support Project* are two such examples.

Survive and Thrive Virtual Conference for Beginning Teachers is a site designed for teachers in their first five years of teaching and provides online conferences given by experts around the following themes: literacy, working with parents and families, professional issues, classroom management, special education, assessment and reporting. Resource documents, chat rooms and links are provided. The resource does not appear to provide mentoring and peer support but facilitates communication through questions posed to webcast keynote presentations.

The Novice Teacher Support Project is a site developed to support teachers in their first three years of teaching and comprises face to face workshops, summer institutes, electronic resources and mentoring. The project provides resource support to e-mentoring and values face to face meetings as part of its mentoring program between novice and expert teachers. The professional development support, through discussion forums, e-mentoring and face to face workshops, is linked to state-based professional teaching standards.

In an effort to address many of the problems faced by beginning teachers without a supportive community, the Faculty of Education at the University of Wollongong is planning the development of a web site designed specifically for novice teachers. Unlike many similar sites, it will not attempt to create communities from scratch, as problems of identification, establishment and maintenance of such communities have been experienced (Schuck, 2003). Instead, it will build on existing communities—those established at university in cohort groups comprising preservice teachers and their university teachers. It will be a comprehensive, professional development context within which teachers can engage in authentic problem resolution in relation to their own needs and concerns as beginning teachers. In so doing, they can draw on the support and experiences of those they know and trust. Its features will resemble a navigable 3D building or institute, and will be based on recommended design principles (e.g., Wenger, McDermott and Snyder, 2002).

The site will include:

- a *discussion board*, where authentic problems and issues of relevance can be discussed with peers from their university cohort. The discussion will also involve lecturers from the teachers' training institution, preservice teachers in their final year of study, and expert teachers.
- *frequently encountered problems* that teachers typically encounter in their first two years of teaching, where problems and issues (archived from the discussion board) are discussed together with suggested solutions and advice;
- *listservs* relevant to general and specific areas of teaching;
- *exemplary teaching* videos, where teachers can view a variety of teaching and assessment strategies demonstrated by expert teachers in classrooms;
- *links to lesson plan* resources, where teachers can download lessons in different learning areas;
- *links to professional development modules (generic, self-directed)* in areas such as numeracy, literacy, integrating technology in the classroom;
- *links* to a variety of websites and resources including those provided by Education Departments and Professional Associations;

- a *virtual bookshelf* where online articles and papers can be accessed on a range of classroom issues such as professional standards, curriculum frameworks, class management, literacy and numeracy issues, assessment, parent interaction and professional isolation;
- an *online journal* where users can bookmark and annotate content as well as keep a record of useful information or insights which they have gained in their use of the system;
- a *publication interface* to allow users to share insights and content from their journal for use by other system users. This will be implemented via a simplified web page creation tool and essentially create an optional, 'personal homepage' for all users;
- comprehensive *feedback, tracking and profiling* within the system to enable statistical analysis of the most commonly used facilities and areas, as well as the ability for users to submit comments and ideas about the system. In this way the system can evolve and grow in conjunction with the users and possibly more completely serve their needs.

It is envisaged that teachers will be able to readily access a wealth of support and resources as they plan their lessons and activities, and reflect on their daily school experiences. It is hoped that the site will be amongst the most frequently visited by new teachers who will come to be familiar with the site, its rooms and its layout, to the point where it becomes like a well known building full of useful resources and friendly faces. In this way, the internet will provide the space for the development of a true community of practice for these isolated teachers. In the first year of implementation of the community of practice, the website will be used as a focus for the identification of problems facing new teachers, and it will be investigated for its potential to provide meaningful professional development and support for teachers in their first three years of teaching.

Evaluation

An evaluation of such a site can take a number of forms. In the short term it would be important to determine the extent to which an online community of practice can provide a valuable source of professional development and support for beginning teachers. In the longer term it is necessary to understand the extent to which an online community of practice can reduce attrition rates of beginning teachers. Each question will involve different research techniques and approaches. It is envisaged that the site could be evaluated using the following techniques:

- *Internet surveys* will be conducted with first year teachers exiting from teacher training courses and who have gained employment as teachers. They will be surveyed to provide information on: general and content-specific problems facing neophyte professionals in metropolitan, regional and rural areas; how well elements of the website assisted them in overcoming these problems; and their opinions on the impact of the Internet in ameliorating professional isolation. Using the Internet for the survey has significant potential in terms of: access to remote areas and specific interest groups, the ability to accurately capture participants' perspectives without researcher bias, and reduced costs (Mann & Stewart, 2000).
- *Case studies* can be conducted with teachers selected for in-depth investigation and consultation. Interviews can be conducted both on site and via email with each teacher. In-depth, face-to-face, negotiated interviews (Fontana & Frey, 2000) can be conducted with each teacher, in which their knowledge of the context, meaning and significance of the website, and its influence on their professional development will be explored. Secondly, follow-up email interviews can be conducted, using both longer sequential interviews and shorter probes (Mann & Stewart, 2000). The combination of both types of interviews allows: the establishment of rapport, the collection of both spoken and written data sources, and convenience and cost saving (Mann & Stewart, 2000).
- *Analysis of the online facility* can be undertaken in three ways. Firstly, a usability evaluation (Reeves & Hedberg, 2003) should be conducted to enhance the effectiveness and efficiency of the discussion board, chat room, forum and related facilities. Secondly, access to the website and its resources can be analysed by tracking and profiling the website pages that have been accessed over the study period to enable summary statistical analysis of the system use. Thirdly, the dedicated discussion boards on the site can be archived for analysis. A content analysis (Denzin, 1999) could be conducted to assess the

- types and levels of support provided by mentors, teachers' peers, preservice teachers, professional association experts, the university and school teachers assisting with the discussion board, and the professional development resources available on the site.
- *Focus groups* can be conducted with select participants to discuss developments, monitor emerging issues, share achievements and evaluate progress.

Conclusion

The final report of the *Innovations Summit Implementation Group* (Miles, 2000) attested the urgency of the need to develop innovative online learning environments in education and training. The innovative use of online technologies to deliver collaborative support and professional development linked to professional standards could help to remove the sense of professional isolation felt so acutely by novice teachers. Both the Commonwealth and State governments in Australia provide an array of incentives to attract teachers to enter the profession, particularly to rural and remote regions.

What Australia is reaching towards and must attain is a coherent and effective system to attract, prepare, deploy and retain highly talented teachers. To ensure their development and the advancement of the profession, teachers need to continue their own learning. Strategies are needed to bring about a full articulation of initial teacher education through induction and mentoring to continuing professional learning. (DEST, 2003, p. 66)

Teacher training is a significant national cost that is lost on teachers who leave the profession. Teacher attrition has an important social cost that is particularly evident in regional and rural areas of Australia. Rural and remote schools, with predominantly inexperienced novice teachers, have a higher staff turnover rate than metropolitan schools (Human Rights and Equal Opportunity Commission, 2000). Disparities between rural and metropolitan areas in health, education, employment and technology have the potential to undermine national cohesion (House of Representatives Standing Committee on Primary Industries and Regional Services, 2000; Regional Australia Summit Steering Committee, 2000). Attracting and retaining professionals and para-professionals is a significant factor affecting these outcomes. Professional development and support that is valued by beginning teachers may help to reduce attrition rates thus minimising the national cost of teacher training and maximising social outcomes particularly in rural and regional Australia.

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